



Contents of Volume 89, 1998

VOL. 89, NO. 1

JANUARY 1998

<i>Publisher's Note</i>	v
Fluxes of CO ₂ , water vapor, and energy from a prairie ecosystem during the seasonal transition from carbon sink to carbon source J.M. Ham and A.K. Knapp	1
Spatial variability of surface properties and estimation of surface fluxes of a savannah I. Braud	15
CO ₂ concentration profiles, and carbon and oxygen isotopes in C ₃ and C ₄ crop canopies N. Buchmann and J.R. Ehleringer	45
Modelling local-scale frost variations using mobile temperature measurements with a GIS K. Blennow and P. Persson	59
<i>Book Review</i> Amazonian Deforestation and Climate	73

VOL. 89, NO. 2

FEBRUARY 1998

Measurement of thermal properties and water content of unsaturated sandy soil using dual-probe heat-pulse probes K.L. Bristow	75
Testing winter wheat simulation models' predictions against observed UK grain yields S. Landau, R.A.C. Mitchell, V. Barnett, J.J. Colls, J. Craigon, K.L. Moore and R.W. Payne	85
Vulnerability of rice and wheat yields in NW India to future changes in climate M. Lal, K.K. Singh, L.S. Rathore, G. Srinivasan and S.A. Saseendran	101
Optimal use and economic value of weather forecasts for lettuce irrigation in a humid climate D.S. Wilks and D.W. Wolfe	115
Seasonal variations of the exchange of CO ₂ and H ₂ O between a grassland and the atmosphere: An experimental study N. Saigusa, T. Oikawa and S. Liu	131
A novel multipoint measuring system of photosynthetically active radiation L. Palva, E. Garam, F. Manoochchri, R. Sepponen, P. Hari, K. Rajala, H. Ruotoistenmäki and I. Seppälä	141
Guide for authors—Geo-science publications	149

VOL. 89, NOS. 3–4

20 FEBRUARY 1998

Surface energy balance of a corn residue-covered field T.J. Sauer, J.L. Hatfield, J.H. Prueger and J.M. Norman	155
Maize canopies under two soil water regimes. I. Diurnal patterns of energy balance, carbon dioxide flux, and canopy conductance P. Steduto and T.C. Hsiao	169
Maize canopies under two soil water regimes. II. Seasonal trends of evapotranspiration, carbon dioxide assimilation and canopy conductance, and as related to leaf area index P. Steduto and T.C. Hsiao	185
Maize canopies under two soil water regimes. III. Variation in coupling with the atmosphere and the role of leaf area index P. Steduto and T.C. Hsiao	201

Maize canopies under two soil water regimes. IV. Validity of Bowen ratio–energy balance technique for measuring water vapor and carbon dioxide fluxes at 5-min intervals P. Steduto and T.C. Hsiao	215
Dependence of sugar beet yield on light interception and evapotranspiration A.R. Werker and K.W. Jaggard	229
Foliage determinants of light interception in sunny and shaded branches of <i>Fagus sylvatica</i> (L.) I. Planchais and H. Sinoquet	241
Leaf boundary layer conductance in a vineyard in Portugal F.A. Daudet, J. Silvestre, M.I. Ferreira, C. Valancogne and F. Pradelle	255
Radiative exchange, near-surface temperature and soil water of forest and cropland in interior Alaska B.S. Sharratt	269
Ultraviolet irradiance of inclined planes at the top of plant canopies R.H. Grant	281
<i>Contents of Volume 89, 1998</i>	295

